

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-37 are pending in the present application. Claims 1-36 are amended and Claim 37 is added by the present amendment. New Claim 37 includes features similar to those of Claim 2, as originally filed, without using means-plus-function terminology. Thus, no new matter is added.

In the outstanding Office Action, the claims were objected to; Claims 2, 21 and 35 were rejected under 35 U.S.C. § 112, second paragraph; Claims 2, 21 and 35 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,353,596 to Grossglauser et al. (herein "Grossglauser I") in view of Grossglauser, "SEAM: Scalable and Efficient ATM Multicast" (herein "Grossglauser II"); and Claims 1, 3-20, 22-34 and 36 were indicated as allowable if rewritten to overcome the claim objectives as described above.

Initially, Applicant thanks the Examiner for the indication of allowable subject matter. Accordingly, Claims 1, 2, 4, 9, 12, 18 and 26 are amended to correct the informalities identified in the outstanding Office Action as well as to correct other minor informalities.

Hence, it is respectfully submitted Claims 1, 3-20, 22-34 and 36 are allowable.

Regarding the rejection of Claims 2, 21 and 35 under 35 U.S.C. § 112, second paragraph, Claims 2, 21 and 35 are amended as suggested in the outstanding Office Action. Accordingly, it is respectfully requested that rejection be withdrawn.

Applicants respectfully traverse the rejection of Claims 2, 21 and 35 under 35 U.S.C. § 103(a) as unpatentable over Grossglauser I and Grossglauser II.

Claim 2 is directed to an IPATM transmission network that supports multipoint-to-multipoint multi-casting between groups of endpoints. The network includes a plurality of nodes and a plurality of endpoints adapted to act as data senders or receivers, and the nodes

and endpoints are linked by ATM. The network also includes means for building a single spanning delivery tree between at least one sender and all receivers that belong to a multicasting group of endpoints and only one virtual circuit (VC) is employed to transmit data over the single spanning delivery tree. Claim 21 includes similar features directed to a method of multipoint-to-multipoint multi-casting.

In a non-limiting example an IPATM transmission network according to the claimed invention includes, for example, a hierarchy of multi-cast name service servers (MNS servers) (e.g. means for building a single spanning delivery tree). The MNS servers provide unused IP multi-cast addresses to nodes by passing queries between one another.¹

Thus, an IPATM transmission network or method of communicating therein according to the claimed invention advantageously overcomes a problem in conventional multi-cast routing protocols that use core based trees where advertising the location of the core to every multi-cast router is a largely unresolved problem.²

Applicant respectfully submits that the combined disclosure of Grossglauser I and Grossglauser II does not teach or suggest means for building a single spanning delivery tree. Grossglauser I and Grossglauser II merely describe a method of "short-cutting packets in a packet switch to allow for the transmission of a packet to follow the shortest path along the shared tree."³ In other words Grossglauser I and Grossglauser II describe a modification to switching nodes to overcome a problem of using ATM in a multi-casting environment, where packets are being segmented into cells and where switches may inadvertently interleave the contents of a packet when that packet is received as individual cells.⁴ However, Grossglauser I and Grossglauser II do not teach or suggest any means for building a single spanning delivery tree between at least one sender and all receivers that belong to a multi-

¹ Specification at page 11, lines 18-22.

² Specification at page 11, lines 7-10.

³ Grossglauser I at Abstract.

⁴ Grossglauser I, column 9, line 47 to column 10, line 10 and Fig. 2.

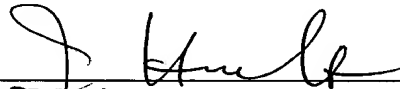
casting group of endpoints. Hence, Applicant respectfully submits that the combined disclosure of Grossglauser I and Grossglauser II do not teach or suggest "means for building a single spanning delivery tree between at least one sender and all receivers that belong to a multi-casting group of endpoints," as recited in Claims 2 and 21.

Accordingly, Applicant respectfully submits that independent Claims 2 and 21, and claims depending therefrom, are allowable.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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